ABSTRACT

An optical transmission system including a pulse train generating means converting each data signal to a pulse train, respectively, based on at least one encoding pattern that is uniquely predetermined to correspond to the data signals, and outputting the pulse train(s). Further, the system including an optical modulating means converting the pulse train(s) output from the pulse train generating means to an optically modulated signal and outputting the signal, and including an optical transmission path for transmitting the optically modulated signal that is output from the optical modulating means. The system also including an optical detecting means converting the optically modulated signal transmitted on the optical transmission path to an electrical signal and outputting the signal, and including data signal extracting means for obtaining the pulse train from the electrical signal and extracting the data signal(s).